

TWO WEEKS IN THE KIMBERLEY

My presentation to the club at its September general meeting was aimed at conveying something of the complex geology and of the varied landforms, landscapes, plants and wildlife of the Kimberley, as experienced during a fortnight spent touring that vast region in the first half of September, 2012.

The Kimberley region is almost twice the size of Victoria in area and sparsely populated, with a population of approx. 40,000, the main centres being Broome, Derby and Kununurra. Abel Tasman was the first European known to have sighted its coastline, during his 1644 expedition. Phillip Parker King compiled the first detailed charts of that greatly indented coastline between 1818 and 1821, and George Grey undertook early land exploration around the Prince Regent River in 1838. In 1879 Alexander Forrest explored the Fitzroy River region and north to the King Leopold ranges. There was little activity involving non-indigenous peoples until Broome became a major pearling centre from the 1880s.

The complexity of the region's geology derives in part from the fact that, approximately 1900 mya, the landmass of today's Kimberley was drifting towards the continent that made up the remainder of northern Australia. Their collision produced major crustal upheavals – along a fault-line that extends roughly in an arc from Broome to Kununurra. The sandstones of the Kimberley Plateau derive from sediments from a mighty river that flowed in from the north around 1800 mya. Much later, about 600 mya, saw basaltic lava flows which subsequently eroded to form the rich soils of the Ord River plains. Around 350 mya a tropical sea surrounded the Kimberley Plateau on three sides – part of a resulting “barrier reef” can today be seen in the limestone ridges of the Napier Range north-west of Fitzroy Crossing. Over time, the high rainfalls led to greatly eroded river valleys which formed the indented coastline as sea levels rose to current levels.

The main habitats of the Kimberley are:

- **Savannah Woodlands**, in which the dominant trees are eucalypts,

including Woollybutt, *E. miniata*, with an understorey of Spinifex and tall grasses such as Spear Grass. Some areas have a sub-canopy of Fan Palms, *Livistona eastonii*. The Boab, *Adansonia gregorii*, is endemic to savannah country.

- **Tropical Rainforest**, in small patches across the region, such as along the Mitchell River.
- **Mangroves** in flat tidal areas – 17 species have so far been identified.
- **Pindan** – in the transition zone between the monsoonal tropics and the Great Sandy Desert to the south, with a low canopy of acacias including the Pindan Wattle over a sparse grassy understorey.
- **Riparian zones** display *Melaleuca* sp., *Pandanus* sp. and Screw Palms (sometimes also called Screw Pines, but in fact neither a palm nor a pine).

Faunal records for the Kimberley include around 70 species of native mammals, including notably the carnivorous Northern Quoll which is fatally poisoned when it bites the sadly now-present cane toad behind its neck. Approximately 370 bird species are listed, including the Black Grass Wren, possibly the only strictly regional endemic.

Our journey took us from Broome across to Fitzroy Crossing and Geikie Gorge NP via the Great Northern Highway. The Leopold Downs Road allowed us to access the Tunnel Creek NP, where that creek has eroded a walkable tunnel right through the Napier Range, and Windjana Gorge, carved through the same range by the Lennard River, before joining the Gibb River Road which connects Derby and the Great Northern Hwy near Kununurra. A highlight was the side trip onto the Mitchell Plateau via the challenging Kalumburu Road, thus allowing us to walk into the famous four-tier Mitchell Falls and to take a helicopter flight over a section of the Mitchell River. We were indeed fortunate to experience the falls

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in high flow this late in the dry season. The laterite-capped bauxite-rich plateau is noted for its Fan Palm, *Livistona eastonii*, or dangana to the Kalumburu people. Returning to the Gibb River Road, we ventured on to the El Questro Wilderness Park to access the Chamberlain and Emma Gorges. From the north-eastern end of the Gibb River Road, we headed to the port of Wyndham, where a high point gives a view over the massive flood plain/estuary where the Forrest, Pentecost, Durack, King and Ord Rivers flow into Cambridge Gulf. Another trip highlight was a cruise on the Ord River between Lake Argyle and Kununurra township, for a feast of birdlife including the Comb-crested Jacana. The journey concluded with a visit to the not-to-be-missed 240,000 ha Purnululu NP to the south. The park was declared as recently as 1987 and gained World Heritage Area status in 2003. Its Bungle Bungle Range is a deeply dissected plateau of sandstone and conglomerate deposited in the Devonian, up to 580 m. above sea level. The notable dark grey and orange banding on the 'beehive' towers is a thin skin of clay and silica over white sandstone, with the colour depending on the permeability of the layers. The less porous bands are coloured by iron oxide, and the grey/black colour is due to the presence of cyanobacteria. By walking into Cathedral Gorge and the incredibly narrow Echidna Chasm, we were able to understand a little more of the erosion processes that created the present landscape.

To conclude, here is the list of birds which we saw during the trip – very limited due to our very basic skills in that direction:

Red-tailed Black Cockato	Sacred Ibis
Double-barred Finch	Jabiru
Australian Bustard	Comb-crested Jacana
Silver-crowned Friarbird	Azure Kingfisher
Pied Butcherbird	Fork-tailed Kite
Great Black Cormorant	Whistling Kite
Little Black Cormorant	Pelican
Pied Cormorant	Osprey
Little Pied Cormorant	Blue-winged Kookaburra
Wedge-tailed Eagle	Fairy Martin
Crested Pigeon	Red-winged Parrot
Galah	White-bellied Sea Eagle
Australasian Grebe	Purple Swamp-hen
Philip Rayment	

VALE BARBARA NIELSEN

The Club records with regret the death of former club member Barbara Nielsen in Traralgon on 13th December 2014, at the Brookfield Park Nursing Home. Longer-standing members may recall that Barbara served as club Secretary in 1990 and 91, back when General Meetings were held in the Regional Directorate of Education offices in Moe. Sadly, she then suffered a debilitating illness and required institutional supported care for the remainder of her life.

BOTANY EXCURSION TO DOWNIES LANE, TRARALGON SOUTH

The botany group has had a number of excursions to Traralgon South, visiting such places as the Traralgon South Flora & Fauna Reserve, the Wildflower Reserve, Whitelaws track etc. As this was Bon & Ollie Thomson's patch, we were aware of other reserves they had been involved in which were not well known or signposted in any way. We thought it would be a good idea to find out more about these places, and try to locate and visit one each year.

Downies Lane seemed a good place to start, as Bon had written about it when asked to put down the details of places the club had been active in getting reserved. All this has been published in the Naturalist, and in the Club history, but I will summarise what Bon wrote about Downies Lane.

In the early 1960s, APM bought the property adjoining our farm and planned to plant it in pines. Part of it included a patch of bush that we had walked in looking at the plants. We contacted the LVFNC, as we were not members at that stage, and not confident identifying plants (that's hard to imagine!) and asked them if they would identify the plants with a view to saving the remnant. Jean Galbraith and others came out and prepared a plant list, and ultimately 8 acres of bush was reserved.

Bon gave me all her folders of plant lists when she and Ollie moved into aged care, so I looked through to see if there was a list for Downies Lane. Imagine my surprise and pleasure when I found the original plant list in Jean Galbraith's handwriting and an

accompanying letter from Jean. It also included lists typed by Bon with additional plants written on, probably after subsequent visits. No doubt they visited this patch of bush next door many times in many seasons, so we would not expect to find all the plants on their list.

On Saturday 4th October the botany group visited the site. It is the first patch of bush on the left after crossing the Traralgon Creek when travelling along Downies Lane from the Traralgon Creek Road, just past the driveway into Bon & Ollie's old farm. It has the paddock boundary of their farm on one side, and plantation trees on the other.

The reserve has an overstorey of Messmate and Narrow-leafed Peppermint, with some pines and plantation gums (probably Shining Gums) encroaching from the plantation areas. The most conspicuous understorey plants were Showy Bossiaea, *Bossiaea cinerea*, Dogwood *Cassinia longifolia*, Bracken and *Correa reflexa var speciosa*. This was previously *C. var cardinalis* and is the beautiful bright red form of *Correa reflexa*. It had large, long red flower tubes fringed with green and is featured on the front cover of Jean Galbraith's field guide *Wildflowers of South-east Australia*. Quoting from Meredith Fletcher's new book, *Jean Galbraith: Writer in a Valley*, when she was asked to choose a pen name for her first garden articles she wrote, 'Jean chose her favourite local wildflower, a flower with vibrant red bells and a soft musical name: Correa.' Meredith asked Ken Harris for a photo of this flower to include in the book, and Ken spent many hours searching Traralgon South, Callignee South and even as far as Gormandale, and finally found a few plants on top of a bank. This reserve has them in profusion.

Andrew and Brian Green scouted far and wide for orchids, and our list for the day only included 7 orchids: Mosquito Orchid *Acianthus pusillus*, Large Duck-orchid *Caleana major*, Autumn Bird-orchid *Chiloglottis reflexa*, Waxlip *Glossodia major*, Slender Sun-orchid *Thelymitra pauciflora*, Red Beak Orchid *Pyrorchis nigricans* and Hyacinth Orchid *Dipodium roseum*. Only the Waxlips and Red beaks were flowering, and the Flying Duck and

Sun Orchid were in bud. Jean Galbraith's list from their visit in October 1965 had 19 orchids, which is an amazing number for a single visit. Bon & Ollie's list has 26 orchids, which would have been recorded over many visits. Why did we see so few? The reserve was badly burnt on Black Saturday, Feb 2009. Has this affected orchid numbers? We didn't cover the whole reserve, so could have missed some. The understorey cover was not so dense as to shade out orchids. This is something to be puzzled over. Ken Smith has told me that this year is bad for finding flowering orchids around the area, maybe due to lack of rain.

Whilst writing this article, I reached a point in Meredith Fletcher's book that talked about the reserve, this time when Jean wrote about it in an article at the end of 1965 for the *Australian Garden Lover*:

Jean/Correa told her gardening readers of one attempt to save remnant bush from pine plantations. The bush was especially precious to her because of the correa still growing there. 'It is many years since red correa (known as var.cardinalis) was abundant in the heathlands south of our valley, she wrote. 'We used to go out to see it every year, then during the years I could do little travelling about was an era of much clearing, and later I discovered that correa had become rare in every place where we used to see it'. Members of the LVFNC had been alerted to an area where the correa grew at Traralgon South on a hill of wildflowers above a farm, and went out to inspect the area. Jean had a special role among the field naturalists.

I was the only one who knew those hills before they were despoiled and could tell if this was a fair sample of what they had been. It was and I shall not soon forget it.

Already we could see various kinds of peas and riceflowers and a shower of correa bells on the high cutting. That was only the beginning. Pink bells and orchids, correa and wattles, sundews and trigger plants and coral pea. There were more bushes of

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correa var cardinalis than I had seen for twenty years.... As we walked down the hill I found myself thinking, "It can't be lost, not when we have found it at last". But of course it can be, as so much else has been."¹

I enjoyed spending time at this reserve on Downies Lane, and thinking of those club members such as Bon & Ollie and Jean Galbraith who had walked here before me and to whom it had meant so much.

Wendy Savage

¹ Meredith Fletcher, *Jean Galbraith: Writer in a Valley*, Monash University Publishing, 2014

REPORT ON BUSINESS MEETINGS HELD 24.11.2014

General Meetings & Excursions

Friday 27 February: Environmental Contracts – Alan Noy

Saturday 28 February: Anderson Inlet with Friends of Venus Bay. Meet 10am at jetty (with toilets). Turn right into Lees Rd immediately on reaching Venus Bay and follow it round to the 2nd estate to Fishermans Rd on right which leads to jetty. Short car shuffle needed. Lunch at jetty.

Friday 27 March: AGM. Lower Latrobe Meander Restoration – Matt Bowler

Saturday 28 March: Excursion to Lower Latrobe Meander near Kilmany. Meet 10am at Rosedale main carpark (with toilets) opposite the bakery. Further directions available from there.

Botany Group: Saturday 14 February: Mallacoota plants at Wendy's. Contact: Wendy Savage ☎ 5634 2246.

Bird Group: Tuesday 3 March Twitcher's Cottage & Mt Worth SP. Meet by 8.30 at Twitcher's Cottage, Mt Worth Rd. Contact: Alix Williams ☎ 5127 3393, alixw@spin.net.au.

Finance – Cash Mgt Trading A/c \$3014.48. Term Deposit \$14,386.10.

Business Arising, Correspondence & General Business

Still pending: botany microscope; purchase of spare bulb for data projector; SEANA risk management policies.

Summer Camp at Mallacoota 6-10 February 2015 – Excursions to Mallacoota surrounds; Genoa Peak, River and Falls; Wallagaraugh Forest and Nadgee Nature Reserve.

2015 Program ready by Christmas Party.

Lichen pamphlet has been printed and is available for \$2. Money from sales will go to club. Well done Ken and Simone.

Donation from club to Jennifer Lavers for plastics research – on moving her employment from Monash she had difficulty getting Monash to release the funds to University Tasmania. Monash intended to keep it for general biological research, but with Ken Savage's assistance they reversed their decision.

Edward Hunter development in Wagners Paddock – will send a supporting letter to be read out at the hearing on December 16. Jackie will prepare a draft.

Naturalist changes for 2015. Majority view is to use office of the sitting member of parliament to print magazine; and to send electronic version as an attachment, not a link. From the May/June issue, use a new format, deleting the coloured covers, and have a banner on the top of the first page with information below, which will be suitable for both electronic and printed versions. Editor wishes to retire, so will seek a new editor to work with these changes.

SEANA Spring 2016 camp – The ANN 2016 Get-together will be hosted by WA Field Naturalists during last week of August and first week of September. Phil to contact Norma Garlick, Sale FNC to arrange date for SEANA camp and a meeting early in 2015.

Membership subscriptions 2015-16. Due to the changes to the Naturalist still being finalized which will impact on these, recommendations will be prepared for a decision by committee at a later date and published in Jan/Feb Naturalist.

AGM 27 MARCH 2015

Positions vacant will be:

President Vice President 1

Treasurer Assistant Secretary

SUBSCRIPTIONS FOR 2015-16

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Proposed new fees for the coming year:

Family \$40 posted, \$35 electronic; Single \$25 posted, \$20 electronic; Student/Naturalist only \$10 posted, \$5 electronic.

SEANA AUTUMN CAMP

13–15 March, at Ballarat East – Pax Hill
Information: FNC Ballarat, Emily Noble,
Sec: 0433344287, ballaratfnc@gmail.com

WELCOME TO NEW MEMBERS

Madelon Lane and Trevor Preston from Carrajung Lower – we wish you a long and happy association with us.

SPRING INTO NATURE – URALLA NATURE RESERVE OPEN DAY 11.10.14

The Uralla Nature Reserve (45ha) at Trafalgar is owned by Trust For Nature and managed by the Baw Baw Shire and the Friends of Uralla Nature Reserve. The purpose of this first Open Day was to provide a range of experiences in the natural environment for local people.

The day started at 10.00am with John Hick (Regional Manager-Trust For Nature) giving an overview of Uralla's valuable remnant vegetation types and the day's activities. This was followed by Ann Williamson (wildlife ecologist) who showed people four bat species she had caught overnight in a Harp trap set up at Uralla.

Following Ann's talk there was the option of walks around Uralla mainly along Donaldson's and Stewart's tracks. We were accompanied by a number of Latrobe Valley Field Naturalist members and were fortunate to have with us also Nicholas Day, a wildlife artist best known from the book "Field Guide to the Birds of Australia". Visitors chose walks depending on their particular interest with groups stretched out along the tracks with many stops and starts to cover areas of interest: spotting orchids, plants, and birds. Birds included Brown Gerygones, Thornbills and White browed Scrubwrens, but Golden Whistlers with their bright colours and melodious calls were a special treat.

After lunch more walks were conducted to cater for visitors as people came and left. By 4pm there was a lull and a break from

walking, talking and gawking so it was agreed to pause and regroup at 7.30pm. After dinner as dusk set in the bats were released one at a time by the young children and the not so young visitors.

When the sun had set Ann conducted a night time spotlighting walk like the pied piper with her red tinted spot light lighting up features around the nearby tracks and five ring tailed possums were seen. We were hoping to see the Greater Gliders that are recorded for the Reserve, but there weren't any around on Saturday night.

At the end of spotlighting, as a last experience we viewed some moth trapping conducted by Ken Harris from the Field Naturalists Club. Ken uses a large sheet set up with a strong light to attract the moths and he caught around 30 to 40 different types, but it needs a specialist eye to identify the species.

The Uralla Open day was very successful, attendance was good with people from many parts of Gippsland represented with four new bat species and a new bird (Australian Hobby) to be added to the Management Plan, the day had benefits for the organisers and the public on an enjoyable spring day.

Peter McDonald (Uralla C'tee Member)



Ann Williamson showing one of the bat species found

NEW EDITOR REQUIRED – after 22 years it's time for someone with fresh ideas and more up-to-date computer skills to take over the Naturalist. The format will be changing somewhat, so it's a great opportunity to do it your way.

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BIRDS

Birdline Report	A Williams	575 OND
Plastic Pollution and Seabirds (Talk by Jennifer Lavers)	K Savage	569 April
Phillip Island Excursion	D Stickney	570 May

BOTANY

Den of Nargun	W Savage	570 May
Hooray for <i>Acacia</i>	J Tims	574 Sept
Mt Worth SP-Part 1 (Excursion 2013)	E Adams	574 Sept
Mt Worth SP-Part 2	E Adams	575 OND
Ophioglossum in the Little Desert	J Tims	570 May
The National Herbarium of Victoria (Talk by David Cantrill)	J Tims	575 OND
Wonthaggi Heathlands Excursion	W Savage	575 OND

ENVIRONMENT & ECOSYSTEMS

Conserving Victoria's Rainforests - Uralla Reserve, Trafalgar	M O'Brien	569 April
Heart Morass	D Stickney	567 JanFeb
Plastic Pollution and Seabirds (Talk by Jennifer Lavers)	K Savage	569 April
Thomson River Fishway	K & W Savage	571 June
Wildlife Health Under the Microscope	T Leitch	571 June

EXCURSIONS

Aberfeldy Excursion 29.3.2014	E Adams	572 July
Club Spring Camp Bacchus Marsh – Long Forest	W Savage	567 JanFeb
Club Summer Camp Dargo – Lankey Plain	J Tims	568 March
Club Summer Camp Dargo – Den of Nargun	W Savage	570 May
Morwell NP Mothing & Spotlighting 26.4.2014	M Cracknell	571 June
Mt Worth SP-Part 1 (2013)	E Adams	574 Sept
Mt Worth SP-Part 2	E Adams	575 OND
Phillip Island Excursion	D Stickney	570 May
Royal Botanic Gardens Cranbourne	P Rayment	568 March
SEANA Autumn 2014 Camp at Marysville	P Rayment	571 June
SEANA Spring 2013 Camp at Numurkah	P Rayment	567 JanFeb
Thomson River Fishway	K & W Savage	571 June
Traralgon Railway Reservoir Conservation Reserve	P Rayment	573 Aug
Uralla Nature Reserve	J Plunkett	573 Aug
Wonthaggi Heathlands Excursion	W Savage	575 OND

FUNGI

Beech Gully Fungi Foray 31.5.2014	K Harris	572
July		

GEOLOGY

Geological Update 2013	G Rowe	568 March
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MARINE LIFE

Marine Life off the East Gippsland Coast (Talk Sep 2013)	M Rowe	572 July
Whale Watching (Talk by Geoff Glare)	G Rowe & P Rayment	573 Aug

MISCELLANEOUS

2013 Index		567 JanFeb
Book Launch – Biography of Jean Galbraith by Meredith Fletcher	P Rayment	573 Aug
North East Passage – Talk	J Parker	568 March
The Future of the Great Barrier Reef	J Tims	575 OND

REPORTS

President's Report 2013-14	D Stickney	570 May
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VALE

Lorna Long		572 July
Lorna Long	W & K Savage	573 Aug